What is claimed is:

1. A projection type display apparatus comprising:

a spatial light modulator for optically modulating an input image to obtain an optical image to be projected;

a projection lens;

an optical member with the spatial light modulator fixed, for guiding the optical image to an incident side of the projection lens;

a first supporting member having a first thermal expansion coefficient; and

a second supporting member having a second thermal expansion coefficient larger than the first thermal expansion coefficient,

wherein the optical member is fixed on a first end part of the first supporting member in a part not to block the optical image emitted from the optical member to the incident side of the projection lens, and the longitudinal direction of the first supporting member with the optical member fixed is provided parallel to the optical axis of the projection lens,

a first end part of the second supporting member is fixed to a second end part of the first supporting member, the second end part being disposed at a position facing the first end part,

a second end part which is an end part opposite to the first end part of the second supporting member is fixed to an incident side end part of the projection lens, and an optical axis of the projection lens and an axis of a light beam emitted from the optical member are parallel,

the second end part of the second supporting member is disposed on an optical member side with respect to the second end part of the first supporting member, and

a thermal expansion amount of the first supporting member from the first end part to the second end part thereof offsets

a thermal expansion amount of the second supporting member from the first end part to the second end part thereof.

2. The projection type display apparatus according to claim 1, wherein the lengths L1 and L2 are set to satisfy $L1 \times k1 = L2 \times k2$,

where L1 is a length from a projection lens side end face of the optical member which emits the optical image to a position at which the second end part of the first supporting member is attached to the first end part of the second supporting member; L2 is a length from a position at which the second end part of the first supporting member is attached to the first end part of the second supporting member, to a position at which the second end part of the second supporting member is fixed to the incident side end part of the projection lens; k1 is the first thermal expansion coefficient; and k2 is the second thermal expansion coefficient.